

BDCP fish screen policy

Accept recommendations 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17, 18, 19, and 20 of the BDCP Fish Facilities Technical Team Draft Technical Memorandum.

With respect to the remaining recommendations:

Accept recommendation 10, with the understanding that it is a goal, and that impacts on riparian habitat that are unavoidable will be fully mitigated.

Recommendations 12 and 14 should be changed and combined as follows. The reasons is that the loss of pumping capacity (reported to be up to 40% during times when the approach velocity is reduced from 0.33 fps to 0.2 fps) is too high a risk to bear, in the event delta smelt become more numerous in the vicinity of the pumps.

Diversions should be designed to operate at an approach velocity of 0.2 fps. When smelt are not present, the diversions may be operated at an approach velocity of 0.33 fps. Diversion structures should be as short in length as practicable to reduce the duration of fish exposure to the screen surface. All screen surfaces should be covered with a blank cover to avoid contact with the screen material when that part of the screen is not being used. Target the height of fish screen panels to fifteen feet of submerged screen height. Taller screens may be appropriate at specific sites for purposes of reducing the length of the diversion structure. If the screens are constructed 40% taller (additional 6 feet), when the river stage exceeds the design minimum, the extra water depth will allow increased diversion capacity while meeting a 0.2 fps approach velocity (during critical times when delta smelt are present).

Recommendation 16 should have the following additional sentence. "Field and laboratory experimentation will be conducted prior to final fish screen design to determine the possible benefits of adding refugia to the screens."

With respect to phasing, all water diversion facilities will be constructed simultaneously, but fish screens will only be ordered for the one diversion facility which is most likely to be used during the first two years of operation. The remainder of the fish screens will be ordered at the end of the second year of operation of the first operational diversion facility. This will allow all the recommended post construction studies to be fully carried out, except numbers 9 and 10. With respect to study 9, by devoting extra time and effort in the first two years, it should be possible to complete adequate predator studies. With respect to study 10, the lower approach velocity should increase juvenile salmon survival rates, and make it possible to complete this study in two years.